

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of existing traffic control signal at the intersection of MD 190 (River Road) and Piney Meetinghouse Road/Marwood Hill Drive in Montgomery County, Maryland. MD 190 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA four (4) phase, full-traffic-actuated mode. The MD 190 through movements operate concurrently. The Piney Meetinghouse Rd/Marwood Hill Dr. through movements will operate in a side street split.

The existing eight phase controller and cabinet will be utilized. Video detection equipment, and load switches for the new phases are to be installed.

EQUIPMENT LIST

A. Material to be furnished by S.H.A.

None.

B1. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

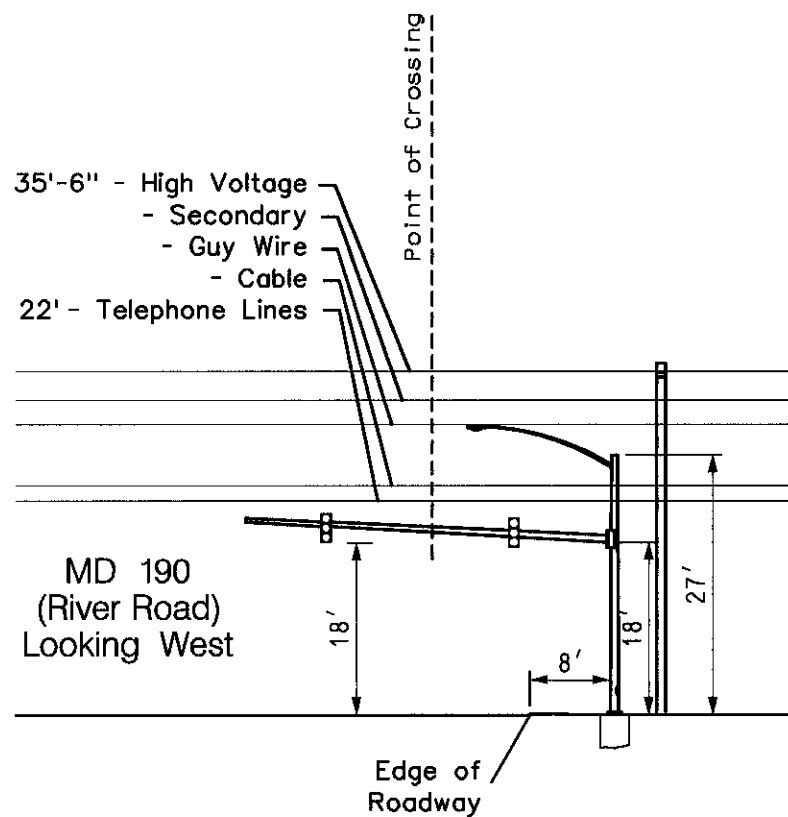
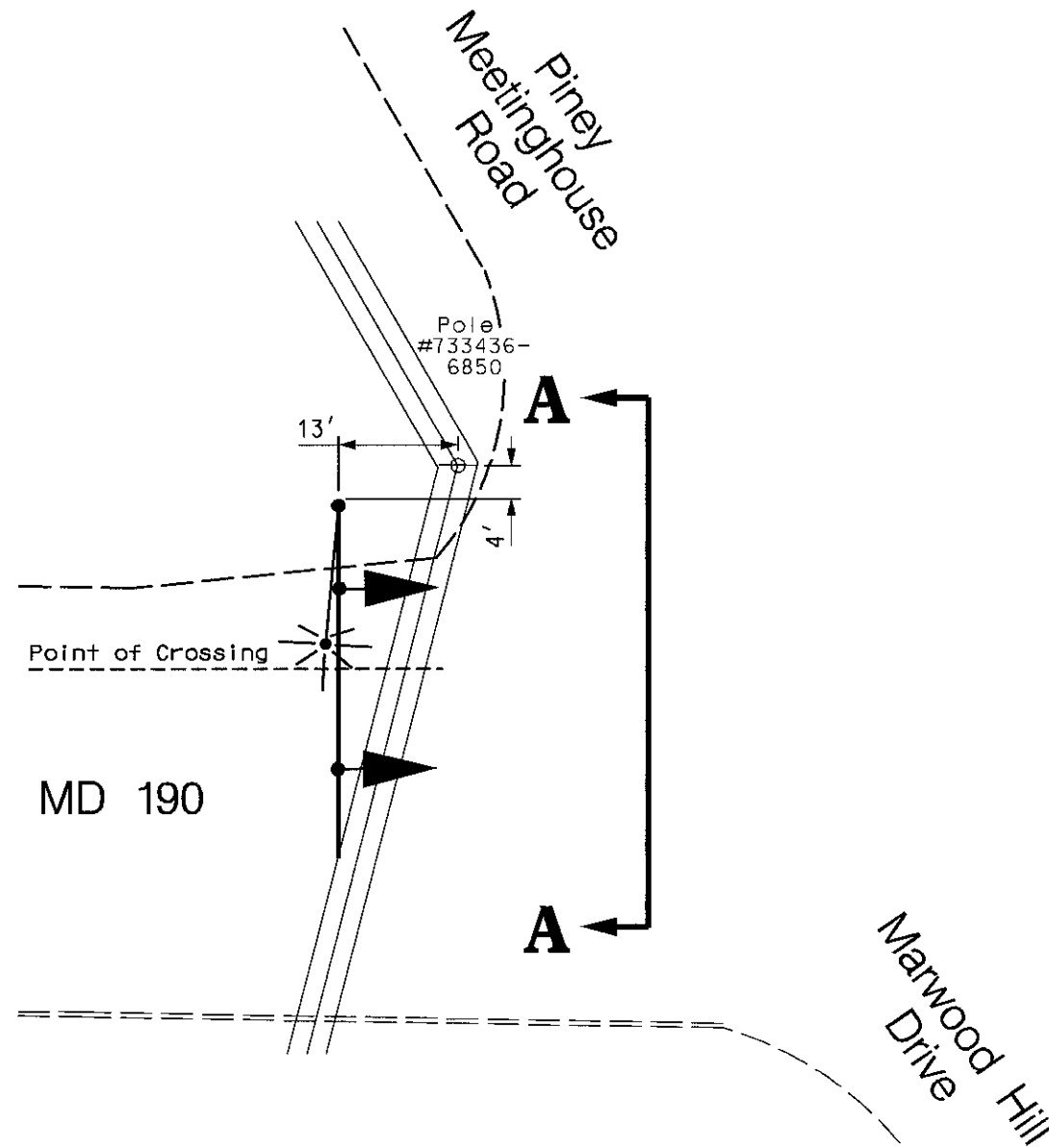
Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm pole with a 38 ft. mast arm.
1	EA	818	27 ft. steel mast arm pole with a 50 ft. mast arm.
1	EA	818	27 ft. steel twin mast arm pole with 50 ft. mast arms.
4	EA	---	Video Detection Camera and Cable. (1 - 200 LF., 2 - 150 LF., 1 - 100 LF.)
1	EA	---	Video Detection interface equipment for existing cabinet.
3	EA	---	Load Switches.
8	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
1	EA	814	8 in., one-way, three section (R,Y,G) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
4	EA	813	16 in. x Var. D-3(1) sign with mast arm mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
2	EA	813	30 in. x 51 in. Shield Assembly sign with pole mounting hardware.
2	EA	813	48 in. x 75 in. Shield Assembly sign with pole mounting hardware.
3	EA	806	15 ft. luminaire arm.
2	EA	806	250 W H.P.S. lamp and luminarie.

B2. Equipment to be furnished and/or installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic (to include temporary police control).
3	CY	205	Test pit excavation.
7	EA	811	Handhole.
380	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
120	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
630	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
50	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
260	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
10	LF	805	2 in. polyvinylchloride [Schedule 80] electrical conduit - trenched.
20	LF	805	3 in. polyvinylchloride [Schedule 80] electrical conduit - trenched.
200	LF	805	4 in. polyvinylchloride [Schedule 80] electrical conduit - slotted in roadway.
1	EA	---	3 in. Weatherhead.
9	CY	801	Concrete foundation for traffic signal equipment.
3	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
1	LF	807	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-14 overhead electrical service.
Lump Sum	LS	---	Relocate existing Interconnect Cable (Approx. 450 ft.).
Lump Sum	LS	---	Remove and salvage existing traffic signal equipment.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

C. Materials to be removed and returned to SHA.  
None.

Overhead Utilities



Section A-A

Scale: 1" = 20'

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Majib Shakib  
Assistant District Engineer - Traffic  
301-513-7358

Mr. Augie Rebish  
Assistant District Engineer - Utility  
301-513-7350

Mr. Randy Brown  
Assistant District Engineer - Maintenance  
301-513-7304

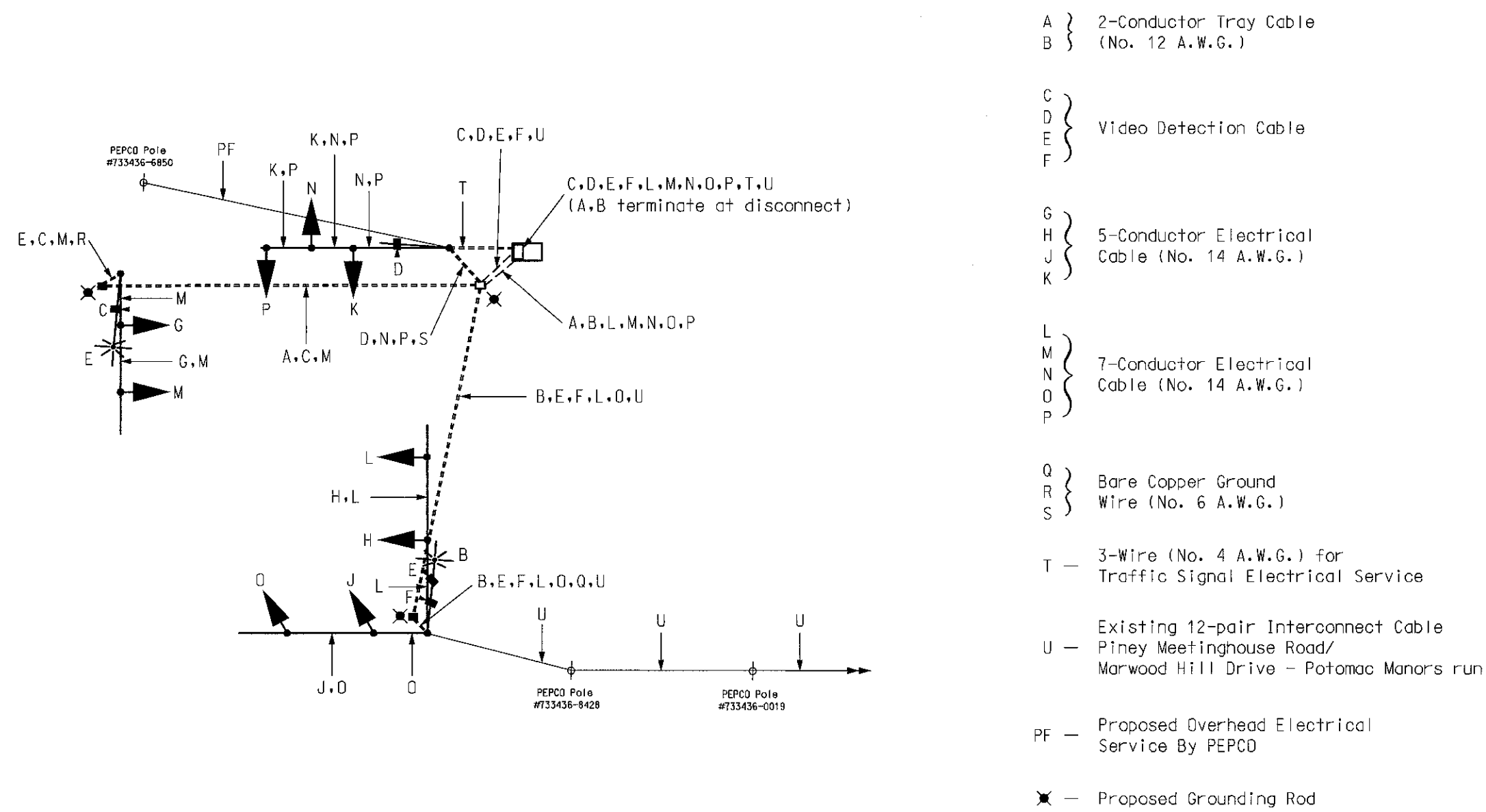
Mr. Richard L. Daff  
Chief, Traffic Operations Division  
410-787-7630

The Power Company Representative is:  
PEPCO

Phase Chart

	1	2	3	4	5	6	7	8	9
	R Y G	R Y G	R Y G	R Y G	O O O	R Y G	R Y G	R Y G	R Y G
Phase 2 & 6	G	G	G	G	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	R	R	R	R	R
Phase 4 & 8	R	R	R	R	G	G	G	G	G
4 & 8 Change	R	R	R	R	Y	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
(General Information Plan)

MD 190 (River Road) at Piney Meetinghouse Road /Marwood Hill Drive

DRAWN BY: F. Brownley	F.A.P. NO. N/A	TS NO. 25268	SHEET NO. 2 OF 2
CHECKED BY: J. Dirndorfer	S.H.A. NO. BW996M82		
SCALE: As Shown	COUNTY: Montgomery	T.I.M.S. NO. F730	
DATE: June 4, 2003	LOG MILE: 15019006.48		